

SEQUENCE LISTING

<110> Yang, Shuwei  
Chatterjee, Deb K.

<120> High Fidelity Polymerases and Uses Thereof

<130> 0942.4500003

<140>

<141>

<150> 60/056,263

<151> 1997-08-29

<150> 60/060,131

<151> 1997-09-26

<150> 60/085,247

<151> 1998-05-13

<160> 37

<170> PatentIn Ver. 2.0

<210> 1

<211> 14

<212> PRT

<213> Escherichia coli

<400> 1

Arg Xaa Xaa Xaa Lys Xaa Xaa Xaa Phe Xaa Xaa Xaa Tyr Xaa

1

5

10

<210> 2

<211> 14

<212> PRT

<213> Escherichia coli

-2-

<400> 2

Arg Arg Ser Ala Lys Ala Ile Asn Phe Gly Leu Ile Tyr Gly  
1 5 10

<210> 3

<211> 14

<212> PRT

<213> Thermus aquaticus

<400> 3

Arg Arg Ala Ala Lys Thr Ile Asn Phe Gly Val Leu Tyr Gly  
1 5 10

<210> 4

<211> 14

<212> PRT

<213> Bacteriophage T7

<400> 4

Arg Asp Asn Ala Lys Thr Phe Ile Tyr Gly Phe Leu Tyr Gly  
1 5 10

<210> 5

<211> 14

<212> PRT

<213> Thermotoga neapolitana

<400> 5

Arg Arg Val Gly Lys Met Val Asn Phe Ser Ile Ile Tyr Gly  
1 5 10

<210> 6

<211> 14

<212> PRT

<213> Bacteriophage T5

<400> 6

-3-

Arg Gln Ala Ala Lys Ala Ile Thr Phe Gly Ile Leu Tyr Gly  
1 5 10

<210> 7

<211> 14

<212> PRT

<213> *Thermotoga maritima*

<400> 7

Arg Arg Ala Gly Lys Met Val Asn Phe Ser Ile Ile Tyr Gly  
1 5 10

<210> 8

<211> 11

<212> PRT

<213> *Thermotoga neapolitana*

<400> 8

Pro Ser Phe Ala Leu Asp Leu Glu Thr Ser Ser  
1 5 10

<210> 9

<211> 11

<212> PRT

<213> *Escherichia coli*

<400> 9

Pro Val Phe Ala Phe Asp Thr Glu Thr Asp Ser  
1 5 10

<210> 10

<211> 11

<212> PRT

<213> *Bacteriophage T5*

<400> 10

Gly Pro Val Ala Phe Asp Ser Glu Thr Ser Ala  
1 5 10

<210> 11

<211> 10

<212> PRT

<213> Bacteriophage T7

<400> 11

Met Ile Val Ser Asp Ile Glu Ala Asn Ala  
1 5 10

<210> 12

<211> 26

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 12

gacgtttcaa gcgctagggc aaaaga

26

<210> 13

<211> 14

<212> PRT

<213> Thermotoga neapolitana

<400> 13

Arg Arg Val Gly Lys Met Val Asn Phe Ser Ile Ile Tyr Gly  
1 5 10

<210> 14

<211> 31

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 14

gtatattata gagtagttaa ccatctttcc a

31

<210> 15

<211> 6

<212> PRT

<213> Thermotoga neapolitana

<400> 15

Phe Leu Phe Asp Gly Thr  
1 5

<210> 16

<211> 6

<212> PRT

<213> Thermus aquaticus

<400> 16

Leu Leu Val Asp Gly His  
1 5

<210> 17

<211> 10

<212> PRT

<213> Thermotoga neapolitana

<400> 17

Ser Leu Ile Thr Gly Asp Lys Asp Met Leu  
1 5 10

<210> 18

<211> 10

<212> PRT

<213> Thermus aquaticus

<400> 18

Arg Ile Leu Thr Ala Asp Lys Asp Leu Tyr  
1 5 10

<210> 19

<211> 35

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 19

gtaggccagg gctgtgccgg caaagagaaa tagtc 35

<210> 20

<211> 35

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 20

gaagcatatc cttggcgccg gttattatga aaatc 35

<210> 21

<211> 27

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 21

caccagacgggta ccgccactgg cagggttg 27

<210> 22

<211> 48

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 22

tatagagtag ttaaccatct ttccaaccgg tttcatttct tcgaacac 48

<210> 23  
<211> 48  
<212> DNA  
<213> Artificial sequence  
  
<220>  
<223> Description of artificial sequence: synthetic oligonucleotide

<400> 23  
tatagagtag ttaaccatct ttccaacccg ttgcatttct tcgaacac 48

<210> 24  
<211> 48  
<212> DNA  
<213> Artificial sequence  
  
<220>  
<223> Description of artificial sequence: synthetic oligonucleotide

<400> 24  
tatagagtag ttaaccatct ttccaacccg gttcatttct tcgaacac 48

<210> 25  
<211> 48  
<212> DNA  
<213> Artificial sequence  
  
<220>  
<223> Description of artificial sequence: synthetic oligonucleotide

<400> 25  
tatagagtag ttaaccatct ttccaacccg atgcatttct tcgaacac 48

<210> 26  
<211> 29  
<212> DNA  
<213> Artificial sequence  
  
<220>  
<223> Description of artificial sequence: synthetic oligonucleotide

<400> 26

aagatgggta acgcgtctat aatatacgg

29

<210> 27

<211> 23

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 27

caagaggcac agagagtttc acc

23

<210> 28

<211> 30

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 28

gtatattata gaggagttaa ccatctttcc

30

<210> 29

<211> 29

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 29

aagatgggta acttctctat aatatacgg

29

<210> 30

<211> 48

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide



<400> 30

tatagagtag ttaaccatct ttccaacccg gtacatgtct tcgttcac

48

<210> 31

<211> 48

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 31

tatagagtag ttaaccatct ttccaacccg caacatgtct tcgttcac

48

<210> 32

<211> 34

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 32

gggagaccgg aattctcctt cattaattcc tata

34

<210> 33

<211> 85

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 33

ataaaagtca cctgcatcag caataattgt atattgtgga gaccctggaa ctataggaat 60  
taatgaagga gaattccggt ctccc

85

<210> 34

<211> 27

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 34

cttggccgcc cgatgcatca gggggtc

27

<210> 35

<211> 30

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 35

cttggccgcc cgcttcatga ggggggccac

30

<210> 36

<211> 27

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 36

cttggccgcc ctgtacatca gggggtc

27

<210> 37

<211> 33

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic oligonucleotide

<400> 37

gaagttcacc atccggccga cccgtcgcat ttc

33